ABSTRACT
        Three professors from the Harrison College of Business at
Southeast Missouri State University were first-time presenters of a new ITV
(interactive television) initiative at the college. This paper is an
introduction to their experiences, including drawbacks and limitations of the
experiences and tips for other first-time presenters. A common outline was
used so that the various aspects of their experiences can be compared. The
outline covers: course title, level, meeting day, time, and particulars;
faculty background and experience; preparation for teaching the ITV course;
classroom teaching style; faculty observations about the experience;
suggested improvements; and conclusions. A list of equipment and description
of classroom setup are included. (MES)

Mid-South Instructional Technology Conference, Spring 2000
Interactive Television Pointers from Three First Time Presenters

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Abstract

Three professors from the Harrison College of Business at Southeast Missouri State University were "first-time-presenters" of a new ITV initiative at the College. The following is an introduction to these professor's experiences. A common outline has been used so that the various aspects of the experiences can be compared.

The professors have described their experiences. They have identified some of the drawbacks and limitations of the experience. Each professor has also offered some tips for other "first time" presenters.

Equipment and Classroom Setup

The classes were taught in a classroom specifically designed for ITV. The campus classroom contained:

An infrared tracking camera (for the instructor)

An instructor microphone

Two front mounted remote controlled cameras for students.

A rear mounted very large screen monitor approximately (4 feet by 6 feet) for the viewing the remote sites - this monitor could view one site at a time or could view up to four remote sites simultaneously

Two rear mounted large screen monitors

One showing the outgoing signal

One showing the incoming signal

Two front mounted large screen monitors showing the remote sites

Hanging microphones in the classroom for classroom pickup

A pentium equipped computer

Internet connected

Power Point Equipped

Equipped to accept other specialized programs

An ELMO document camera

A VCR

A Slide Projector

A front mounted power driven glass beaded viewing screen

A lighting dimmer located at the front of the classroom

A lectern

For each class a student technician was assigned to operate the equipment. The student technician remained with the class/instructor for the entire semester. They were well trained at trouble shooting the system.

Each remote site was equipped with a number of large screen monitors depending upon the size of the room. The remote sites had voice activated microphones and three cameras, one front mounted, one rear mounted and a document camera. The rear mounted camera was not usually operated unless the instructor visited the remote site to teach a class. The remote sites had a student who was responsible for learning the operation of the equipment. These students were not as well trained as the classroom technician.

The sites were also linked by phone and fax (often external to the room) in case of an equipment malfunction. The phones and faxes were not always operational during the evening classes.

To distribute materials from the campus location to the remote sites and vice versa, a courier service was maintained. Additionally, in some cases, some students from the remote sites also attended class on campus. They occasionally acted as couriers also. The courier service was operated on a Monday, Wednesday and Friday schedule.

Dr. James A. Buckenmyer, Professor of Management

Course Title, Level, Meeting Day, Time and Particulars

MG 301 Management and Organization (The beginning Management Class [a required core business class for all business majors.)

Third Year

Wednesday, 7:15 to 9:50

This course is a content ladened course. It is the combination of what had previously been the Principles of Management and Organization Behavior courses. Student learning and retention of the materials presented in this course are tested annually through a nationally normed test (MFAT) usually administered

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in the student's last semester (During the Business Policies and Strategies, the capstone business course.). What the test content will be is not known to the faculty and, therefore, the test is not taught. There is some concern on the faculty members' part that the students perform well on this test.

Faculty Background and Experience

The faculty member was a seasoned full professor in Management. His has a D.B.A. in Management and Organization Behavior. He has been teaching for more than 35 years, at three different regional Universities, all in the "Midwest."

Part of his teaching experience included a video taped TV studio experience teaching a Principles of Management Course in 1982. The video taped class was prepared to be presented as a taped class on the regional cable channels. It was taught before students in the studio (i.e., before a live audience). The studio classroom, equipment and operation were part of the support for a Broadcast Television Master's Degree Program. The master's degree candidates gained real time experience (and internship credit) for their support of the video taping.

The studio classroom had three floor cameras, all with camera operators and assistants. Microphones were mounted in the ceiling. The professor's microphone was hard wired (with a wire up through his pants leg). There was also a floor manager. The teaching equipment included rear screen projection unit for document presentation (controlled by an engineering staff.) as well as an "electronic chalkboard." There were also two television monitors mounted on either side of the very large rear projection screen. The classroom also had a flip chart.

The control room utilized a producer, director, picture controller, sound mixer, and an engineer. Behind the scenes there were additional technical support people.

Because of the required coordination between the control room, floor manager, engineering staff and the professor, it was necessary to script the entire classroom presentation. Scripting was also necessary for the preparation of the materials to be projected on the rear projection screen as well as the electronic chalkboard. Since the engineers were not located in the control room and since there were more than 130 items to be projected whether on the rear screen or electronic chalkboard, the engineers needed a script to follow. The script was actually a narrative outline, that is, a very complete outline in which examples, and other materials were scripted. It was not a full narrative script.

The professor has had some "real world" experience, both in industry and as a consultant.

Preparation for Teaching the ITV Course

Because of the previous experience in teaching on TV and because of suggestions gotten at the Midsouth Teaching Technology Conference, 1998, the professor attempted to script the class. The script consisted of approximately 175 pages (parts double spaced and parts single spaced). It was accompanied by more than 70 overheads/handouts. A textbook was assigned for the course.

The "Teaching Outline" (script) included topical outlines, outline detail (Including listings of factors to be covered), examples and supporting quotations from various works outside of the text book. In general, the

outline <u>did not</u> mirror or follow the textbook. Basically, the teaching outline was based on more than 35 years of teaching the subject. A course outline, based on the teaching outline was provided for the students. The text book chapters covered by each section of the course were indicated for the students. An extensive number of overheads/handouts were prepared from the outlined material (As noted above, more than 70, most of which were prepared by the instructor, not those provided by the text book publisher.). The overhead/handout printouts generally followed the six line, six work suggestions for ITV overhead (power point) although some were significantly longer and more detailed.

The scripting was based on the teaching materials which had been accumulated over the years. It was prepared in an outline form to permit the classroom presentations to be spontaneous and to avoid the appearance of "canned" lectures. Often two or three examples (Many drawn from typical student experiences and from the instructor's industrial, academic administrative and consulting experiences) were used. The students were particularly positive about the examples.

Classroom Teaching Style

Because this was a content ladened course and because of the instructor's particular additions to the already voluminous subject matter, the course was taught very heavily through lecture with encouraged student questions and discussion. Quite honestly, it was very much instructor controlled.

The instructor is known as a very enthusiastic, animated, active, mobile, and loud presenter. (One student at a remote site stated, "You don't have to yell at us!" Other students indicated in evaluations that they appreciated the vibrance and enthusiasm of the instructor.) The instructor attempted to use humor in the presentations, particularly in relation to the examples drawn from the typical student's experience.

The only interaction in the class was the interaction between the students and the instructor in response to questions, either from the instructor to the students (sometimes at the various remote sites) or from the students to the instructor (often from the remote sites). No individual or group activities or other planned interaction between the remote and on campus site were utilized.

Faculty Observations About the Experience

Special Approaches

There were no special approaches utilized in this class. However, based on student preferences, power point was not used. As noted earlier, there were extensive handouts used. These were used in preference to being used as overheads for which they had been designed because of some "build in' lighting problems. The photocopy budget for reproducing the "overheads as handouts was a killer.

Classroom Teaching

No special classroom teaching approach was used. The instructor utilized his normal stand up and blast it out approach.

The instructor did feel somewhat constrained by the equipment. (Although this may have been somewhat psychological). He felt that his ability to freely move around the classroom was restricted by the need to constantly refer to the "script" so not to confuse the ordering of the handouts. There just seemed to be

something in the set up of the room which made me feel uncomfortable and maybe a little intimidated. The feeling never abated through the entire semester.

It was impossible to simultaneously send signals of the document camera and the instructor. Additionally, if the overheads were used as overheads the classroom lights had to be their dimmest for the local students to see them. If the classroom lights were their dimmest, the remote students could not see the instructor. This restricted the use of the document camera.

The white board also caused some problems. Unless the camera was zoomed in on the board the students at the remote sites could not see the board, regardless how dark the markers were or how large the instructor wrote. There was too much light reflection from the board. With the camera zoomed-in on the board the space available for writing was limited. Under normal circumstances the instructor has the entire board filled with scribbling and diagrams.

Student responses were generally quite favorable. The primary responses were related to the few technical difficulties that were experienced and the fact that the white board could not be seen by the students at the remote sites.

Student Activities

No individual or group activities were conducted.

Examinations

There were two examinations of five essay questions each. They were applications questions. The students were given situations and asked what they would do in these situations. This is the professors normal examination procedure.

The remote site students were monitored through the television from the campus site. Each remote site location had an assigned student who handed out the examinations at the exam time. They were sent to the remote site locations in a sealed envelop. This was not an altogether satisfactory solution to monitoring the examinations

Problems

There were a few **equipment** problems. The biggest of these problems was the size of images of the students on the instructor's monitor. Although the screen of the monitor was approximately 4 feet by six feet, when the monitor was split four ways (to cover the two remote sites) and with the distance that the cameras were from the students it was nearly impossible to identify individual students. Secondly, with the two monitors in the front of the room showing the remote sites at all times the on-site students were often distracted by movement at the remote sites. Once there was significant microphone feedback problems between the two remote sites. The students at the remote sites were not aware how to manipulate the cameras or microphones. We lost both sites several times. At times either just the sound or the picture was lost. At times both were lost.

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There was a few **site** problems as well. As indicated above, the cameras were located so far from the students that it was impossible to identify individual students. At one site (a high school) the janitor tried to kick the students out and lock up the room 45 minutes before the class was scheduled to end. Of course his rather boisterous statements activated the microphones and the entire altercation was broadcast over the entire network. It did not happen once, but twice.

Support problems were evidenced also. The remote site locations did not have equipment technicians available. The "trouble" and fax phone numbers we had were day phone numbers (in most cases). Even when we were able to obtain night phone numbers, the phones often were not attended. Although this instructor has little difficulty with the courier service it was necessary to prepare materials a week in advance to get them copied and to the remote sites in time for the class. There was also a significant delay in getting any materials from the remote sites to the campus.

The on-campus technical support in the classroom was very good.

The on-campus support for creating, preparing, of teaching materials and pedagogy was nonexistent. We were told "Just do it." There was no preliminary released time for preparation nor was there released time during the semester. Creating the 175 page "script " and accompanying 70 handouts was an extremely time consuming activity. Ti took the entire previous summer, plus.

Student Observations

Student responses were generally quite favorable. As anticipated, the remote site students were them most enthusiastic, primarily because they did not have to travel the 60 miles to attend the class. One student sent an e-mail to the instructor indicating that he was not a television person, had not expected to like the class but was enthusiastic about the class. Another student commented, in writing, that the instructor "had a gift" for teaching in this way and should continue offering the course. Another student thanked the instructor for offering the course. Several on site students also made positive comments about the class. All in all, the instructor received more positive written comments about this class than he has ever received before for any class.

Suggestions for Improvement

Improve the flexibility of the electronic transfer from screen to screen and location to location

Improve the transferring of hard copy materials from location to location

Place overheads/handouts on web page.

Place spotlight on camera (to use when lights must be dimmed for use of front projection screen)

Possibly a rear projection screen

Possibly an "electronic chalk board"

Suggestions for New ITV Teachers

Do extensive preplanning for the class

Do class preparation at least two weeks in advance

Use extensive overheads/handouts

Make student hard copies available for all overheads/power point

If power point is used keep it clear, simple and uncluttered and do not flash it too quickly

For textual or detailed materials use hard copy handouts

Be sure of the ownership and disposition of any tapes of the class

Conclusions

There was no notification that this class was to be a ITV class. The class was just assigned as the night section of MG 301. During the spring semester, while explaining what I was to be teaching in the fall someone observed, "Oh, that's the ITV class." That is not the way to learn you are teaching ITV. After consideration, the summer was dedicated to preparing the script for the class. I still approached the class with considerable trepidation. During the entire class I was somewhat uncomfortable about the class. The class was not going as I felt it should have been going. Something just did not feel right. This was even mentioned to the in-class technician (trained student). He assured me that everything was OK. His evaluation apparently was better than mine. The class appears to have been very well received. The grades were the best I have ever given - more A's and fewer D's and F's. And the student evaluations were the best I have ever received.

Although I did not look forward to teaching the ITV class I have volunteered to teach the next section of MG 301 to be taught on ITV. If I were asked to teach any other ITV class I am not sure of my reaction. There are several other classes in my repetoire that are presently almost scripted (including numerous overheads) which may be possibilities for future ITV, but I am still not sure what my reaction would be.

David A. Kunz, Professor of Finance

Course Title, Level, Meeting Day, Time and Particulars

FI361 Financial Management: The beginning finance class, a required core business class for all undergraduate business majors.

Meeting Schedule: Monday, 7:15 - 9:50 p.m. (16 week semester)

Enrollment: Thirty-six students were enrolled in the class at the broadcast site and four students were enrolled at one remote site.

Catalog Description: Financial structure and problems of modern business corporations. 3 credit hours. Junior standing.

Course Objectives

1. To survey the principles underlying the financial practices and the financial management of modern business organizations. To learn fundamental financial principles, generalizations and theories.

2. To gain knowledge: terminology, classifications, methods, and trends.

3. To apply course material to improve rational thinking, problem solving and decision-making.

4. To develop specific financial skills and competencies.

5. To emphasize the importance of financial management as it applies to financial activities and how financing decisions impact company profitability.

6. To overview capital markets and investments and their role in financing business organizations.

7. To develop writing communication skills in financial management.

Faculty Background

I am a full professor, with nine years teaching experience. Prior to becoming a full-time academician I was employed in private industry for 19 years. Industry experience included positions as Chief Financial Officer, Treasurer, Vice President of Finance, Controller and a board member for two companies. In addition to a PhD in finance, I am a Certified in Financial Manager (CFM) and Certified in Management Accounting (CMA) Teaching experience includes courses in finance principles, corporate finance, and small business finance. Accounting courses and business strategy courses are also taught. I am an active small business consultant.

Preparation for Teaching the ITV Course

Preparation for the course included attending conferences that involved workshops and presentations on ITV teaching. The University also provided two training programs to acquaint the new instructors with classroom technology and procedures.

I had previously taught subject course numerous times. No special documents, exercises, or other teaching aids were developed for this course. Traditional teaching tools include: 1) lectures supplemented with PowerPoint presentations and financial websites, 2) video tapes, 3) problem review and discussion, and 4) presentation of student research projects.

Classroom Teaching Style

A discussion format is used. All teaching activities are interspersed with questions, illustrations and discussion of concepts and how they apply to business situations. This keeps the students engaged but requires that I to move around the front of the classroom, frequent changes in the presentation mode (computer - PowerPoint, websites, video, board presentation - problem solving), and classroom lighting.

Faculty Observations About the Experience

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The classroom experience was not substantially different than the "normal" course. The fact that I had a web site made the distribution of course materials relatively easy. The use of an instructor website eliminates or minimizes one of the major obstacles that must be overcome when teaching an ITV course, distribution of class materials. Syllabus, class schedules, assignments, and other course "handouts" were made available via the Internet. Students were free to print the information as needed. The use of PowerPoint presentations, tapes, Internet sites during class, except for remote site student presentations, created no unusual challenges. The problems associated with remote site student presentations will be addressed later. The course does involve solving problems and working selected problems on the board for instruction and discussion. This required a change. The white board and lighting created a glare that prevented the camera from projecting readable material to the remote site. To solve this problem, solutions were recorded on paper and the overhead projector was used to send the material to the remote site and to project the material on the screen in the classroom. This solved the "glare " problem but did limit instruction... but I adapted.

Since a discussion format requires a great deal of student interaction, I was concerned about the participation of the students at the remote site. This was not a problem. The students at the remote site participated more frequently than those in the broadcast classroom. I did not make a special effort to include the remote site.

The biggest challenge was the distribution of quizzes and exams to the remote site. The courier service at the beginning of the semester proved to be unreliable. Service improved as the semester progressed but this remained the biggest obstacle to orderly instruction. I never knew if the sent material was received until the beginning of class.

Student presentations require the use of PowerPoint and Internet sites. This required adjustment for remote site presentations since the remote classroom did not have a computer. Remote presentations were accomplished by allowing the remote site students to use slides prepared using PowerPoint and copying Internet sites. Slides were transmitted to the broadcast site using an overhead projector. This method was not as effective as student presentations from the broadcast site but it was a workable solution.

Examinations and quizzes were accomplished by sending the required material to the remote site in a sealed package via the courier. One student at the remote site was designated as the material coordinator. The student was responsible for collecting the material and bringing it to the classroom. The student also distributed and collected material in the classroom for return to the broadcast site. While this did not prove to be a problem, the use of a student to handle exams and quizzes is not an ideal arrangement.

A student technician was present during each class session at the broadcast site so I did not need to be concerned with operating the equipment. Each class was video taped in case the broadcast was interrupted for any reason. The tape was never used; no technical difficulties were experienced during the semester. Teaching the course without the technician would have been substantially more difficult.

Suggested Improvements

In addition to an improved distribution system, and a non-student coordinator at the remote site, an on-line grade book and on-line testing would facilitate teaching an ITV course.

Suggestions for "first time" ITV Instructors

Be organized. Logistic requirements place a premium on advanced planning. Each class needs a detailed schedule. In addition, I had the complete semester schedule available the first night of class.

If you don't have a web site, get one. Without the ability to electronically distribute course material, logistic challenges increase exponentially. A web site and on-line quizzes and testing would eliminate most, if not all, logistic issues.

Since teaching the course, I have started using an on-line grade book. This has proved a useful tool in regular classes but would be exceptionally valuable for an ITV course.

Avoid teaching to the camera. I made no special concessions to the camera and none were needed. Teach as if the camera is not there.

Establish communication with students via e-mail. E-mail is a useful communication tool for all students but is particularly valuable for students at the remote locations who are not on campus regularly.

Remote site student presentations were a challenge. If there had been a larger number of students at the remote site (more than the four I had), I would have required the students to come to the main campus for the presentations or restructured the assignment.

Although I did not have a team assignment, this too could prove to be a challenge. I am not recommending eliminating team projects but they may need to be handled differently than in a traditional classroom setting.

Conclusions

Teaching an ITV course requires the instructor to be organized. I would not hesitate to teach the course or another course again.

Jack L. Sterrett, Professor of Marketing

Course Title, Level, Meeting Day, Time and Particulars

MK301 Principles of Marketing: The beginning marketing class for all marketing majors and minors, and a required core business class for all undergraduate business majors.

Meeting Schedule: Tuesday, 7:15 - 10:00 p.m. (16 week semester)

Enrollment: Thirteen students were enrolled in the class at the broadcast site and eight students were enrolled at two remote sites.

Catalog Description: A managerial approach to marketing focusing on matching organizational goals with customers needs in an ethical and socially responsible manner. Junior standing

Course Objectives.

1. Provide a sound basis of marketing information and understanding for the development of professional

competence in marketing and other related activities.

2. Provide the basis for understanding marketing as a central part of the business process.

3. Demonstrate to the student how marketing principles apply to non-business situations.

4. Develop an understanding of marketing as an economic and social process, and of its role in a free enterprise economy.

5. Enable students to understand the numerous controversial questions arising out of the performance of marketing functions so they may more intelligently exercise their prerogatives of citizenship.

Faculty Background

I am a full-professor with 25 years teaching experience. I have also served in a number of academic administrative positions including my current position as Chairperson of the Department of Marketing and Director of the Center for Entrepreneurial Studies and Small Business Management. I also maintain involvement as a small business consultant.

Preparation for Teaching the ITV Course

Preparation for teaching the ITV course was somewhat limited. I did attend one Mid-South Conference and two ITV training sessions on our campus to become acquainted with the classroom technology and various delivery methodologies, strategies and techniques.

Having taught the Principles of Marketing course at least once a year for the past twenty years, I was well acquainted with the subject matter and have utilized a variety of approaches in teaching the subject matter. Given my teaching style, along with plenty of advice from the literature, I took a fairly traditional approach in terms of teaching the course utilizing a great deal of the supplemental instructional package (Power Point, video tapes, suggested Internet activities and websites) available with the text. No specific material modification was necessary. I also required various case and article assignments/discussions. I personally felt more comfortable, this first time around, maintaining a lecture/discussion format with very limited group/team assignments. In the end, I believe this approach worked best for me and the students. I will plan to include more team assignments if future ITV opportunities arise.

Personal Observations About the Experience

Given my personal teaching style and preferences, I did not find the ITV experience to be much different than any other teaching experience other than I did have eight additional students at two remote sites that I needed to be cognizant of and an on-premise technician who was responsible for operating the equipment to ensure the best quality broadcast as possible. The technician would have the remote sites accessed prior to each class session and would have the responsibility at the broadcast site for light control and for switching of the equipment from Power Point to video to Internet to Elmo (3 dimensional overhead projector), whatever my teaching methodology/approach was for any particular evening.

The key to being successful with ITV (advise from another ITV colleague) is to teach to the students who are immediately in front of you while at the same time, being aware of the students at the various remote sites.

During the first meeting of the course students were introduced to my instructor website in which the

course syllabus, semester class schedule, assignments, article, and other course materials were made available. Students could refer directly to my website and/or print the various documents directly from the website. I found this approach to be most effective and efficient. From time to time I could post various notices to the course bulletin board and would also alert students via e-mail of special notices, announcements, assignments, suggestions, etc. The one major drawback for some students at the remote sites to this approach however was that the remote sites were not computer accessible nor were computer labs readily available to them during the time of broadcast. This scenario was not a significant problem for the majority of the semester. There were a number of occasions however in which I would direct my on-campus class to meet in the instructional computer labs for instruction while the students at the remote sites would be provided with instructions on my website and expected to complete the assigned activities on their own.

A facsimile machine was also available in the broadcast classroom and at the remote sites. From time to time its use was necessary as a backup to our courier system which was available for mailing of hard copy when necessary. In terms of the courier system, this perhaps was the one situation that personally presented the most frustration. The courier system was reasonably unreliable and did present problems at examination times. Also, as a backup to the entire process, each broadcast was videotaped in the event of audio and/or visual failure.

For examination purposes, each remote site had one designated student class facilitator who had the responsibility of retrieving the examinations (and other materials) from the designated courier drop-point. Examinations were generally forwarded to the remote sites in advance of the designated examination date. On the examination dates each facilitator would open both the sealed courier package containing the examination package and the sealed examination package in front of the camera in order for the instructor to see. Although not fool-proof, this process presented some sense of security and relied on trust. Upon completion of each examination, each class facilitator had the responsibility of returning all examination materials appropriately sealed to the courier drop-point for return to campus. On-line testing would be a significant improvement in the future.

Suggestions for "First Time" ITV Instructors

Teach to the group immediately in front of you (colleague advise) while being aware of students at the remote sites. This, I believe is great advise while becoming comfortable with the ITV process.

Be yourself! Initially this may be more difficult while becoming acquainted with ITV, however, I believe this helps in terms of organization and ultimate personal and student performance. Nothing is really different.

Be prepared and organized with course materials and semester schedule at the outset. Provide materials via a personal website and utilize e-mail with attachments when necessary and viable.

Develop on-line testing capabilities. This would help maintain integrity of the testing process, assuming the remote sites were computer accessible and students could be viewed via the ITV system while completing examinations.

Seek feedback more frequently from students at each ITV site to ascertain what works and what doesn't. Don't be afraid to change or modify your classroom methodologies and techniques.

Visit each remote site at least once throughout the term. This, in itself, is an experience.

Conclusions

Teaching an ITV course is an experience that requires some flexibility on the part of the instructor, as well as students. The instructor needs to be in control and the one who sets the appropriate tone from the outset if students are expected to be reasonably flexible with this type of delivery system. Equipment problems, and others, more than likely will be encountered and will impact students at each site. The professor's positive and flexible dem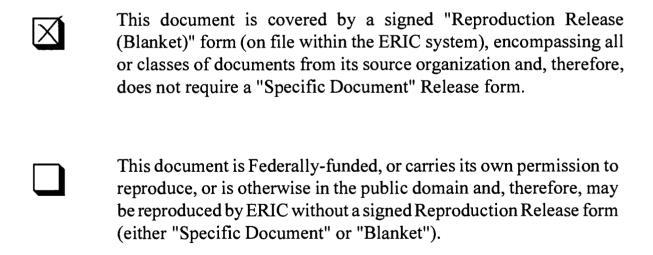eanor is important from the outset.